

# DS POWER X

100-400kVA

Output Power Factor (PF) 1.0

3-Level Technology

DSP Control

1.0

POWER FACTOR



TOWER

VFI  
TYPE

UPS ONLINE



SERVICE /  
TECH. SUPPORT



ECO FRIENDLY



DS Power X Online UPS uses the latest DSP technology, which can be programmed to suit a wide variety of electrical environments without impeding its performance. It stands out with its stylish design, high power density (250KVA in less than 0.5m2 area) and less noisy operation than its counterparts. As a state-of-the-art product, the input and output side have been designed as 3-Level to maximize efficiency, reliability and functionality. This technology not only creates a significant increase in MTBF, but the DSP's ability to accurately process signals at very high speed allows all UPS subsystems to be controlled with greatly increased precision.

## GENERAL SPECIFICATIONS

- kVA = kW (Output PF = 1.0)
- Transformerless ups technology
- 3 DSP controlled modular structure
- High power density
- Separate main control board program for rectifier and inverter
- 3-Level rectifier, inverter technology and fully digital structure
- Less electronic components and SMD technology
- Low input current total harmonic distortion (THDi)
- High input power factor
- High efficiency up to 96.0%
- Selectable input/output voltage/frequency/range
- Static and maintenance by-pass switch
- High charge current capacity
- Ecomode operation (optional)
- Split by-pass input (dual input)
- Advanced TFT front panel
- Optional 0.8 and 0.9 output power factor (PF) option
- Cold start function
- ISO9001, ISO14001 compliant production
- Advanced diagnostics for the input
- 3 level battery protection
- Temperature compensated charge system
- Output current limitation
- Output DC leakage protection
- Output short circuit and overload protection
- External REPO input
- 512 events memory (46.000 alarm)
- Clock and calender (battery supported)
- Automatic battery test, remaining battery time indicator
- Static and maintenance by-pass switch
- 2 RS232 serial ports and 4 programmable dry contact outputs
- Optional 12 dry contact outputs
- Optional SNMP, MODBUS and Remote Monitoring Panel
- View device operating parameters
- Advanced remote control features
- 2 years warranty

## TECHNICAL SPECIFICATIONS

MODEL	DX3100	DX3120	DX3160	DX3200	DX3250	DX3300 (soon)	DX3400 (soon)
Power (kVA)	100	120	160	200	250	300	400
INPUT							
Voltage	380/400 VAC 3P + N + G ± 20% (at 100% load) / - 40% (at 70% load)						
Frequency	50Hz / 60Hz, ± 10%						
Power factor	≥ 0.99						
THDI (*)	≤ 3%						
By-pass voltage	380/400 VAC 3 Phase + N, ± 10 (adjustable)						
Voltage distortion	≤ 10%						
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequency indicator						
OUTPUT							
Power (kW)	100	120	160	200	200	300	400
Power factor (**)	1.0				0.8	1.0	
Voltage	380/400 VAC 3F + N, ± %1						
Frequency	50Hz / 60Hz						
Frequency tolerance	Line synchronized: ± 2% (adjustable) / Free running: ± 0.1%						
Efficiency	up to 95.5%		up to 96.0%				
Crest factor	3:1						
Overload protection	100% - 125% load: 10 min, 125% - 150% load: 1 min, - > 150% load: by pass						
Other protections	Advanced short circuit, Voltage tolerance, DC balance, Regenerative load, Current limiting						
Voltage THD	≤ 2% (linear load), ≤ 5% (non-linear load)						
BATTERIES							
Type	VRLA AGM / GEL / NiCd						
Nominal voltage	± 360 VDC						
Float / End of discharge voltage	± 405 VDC / ± 300 VDC						
Battery cabinet	External						
Battery ambient temperature	25°C						
Protections	3 level alarms, Battery fuses, Charging current limit, Temperature compensation (optional)						
Automatic testing	Standard every 72 hours (adjustable)						
GENERAL							
User interface	TFT touch panel, 5 vector buttons, Buzzer						
Indicators	P-N voltage, P-P voltage, Current, Power, Crest Factor, Frequency, PF, Service Time						
Advanced	Self diagnostics, 3 maintenance time indicators, Calibration over RS232, Operating hour meter						
Communication	2xRS232 serial ports, 4 standard and 8 optional DRY contact alarm relays						
Inputs	EPO input, Interactive battery panel input, Genset input						
Genset kit	Standard (programmable)						
Software	Standard T-Mon UPS Management Software (3 clients + 1 server management)						
Alarm logging	Standard: with time & date 512 events						
Protections	Power module over-temperature, Overcurrent, Temperature high alarm						
Temperature range	0°C - 40°C						
Protection degree	IP20						
Relative humidity	90% max. (non-condensing)						
Altitude	< 1000m above sea level						
Acoustic noise	< 62dBA		< 65 dBA			< 67 dBA	
Weight (kg)	210	220	262	270	295	655	
Dimensions (mm) HxWxD	1440x475x890					1900x1250x775	
OPTIONS							
Different input / output voltage	Please ask						
Transformer	Galvanic isolation transformer at the input & output (external)						
Software	T-Mon Admin Multi UPS monitoring 10-50-100-200 clients, T-Mon Server 50-100-200 clients						
Adaptors	SNMP, RS485, Remote monitoring panel, MODBUS (RS485 or TCP/IP), TCP/IP, GSM/GPRS Modem, Comport multiplexer						
Parallel operation	up to 8						
(*) Depending on power and input/output conditions							
(**) Please ask for PF 0.8 and 0.9							